

ABSTRACT

A method and apparatus for power optimized replay. In one embodiment, the method includes the issuance of an instruction selected from a queue. Once issued, the instruction may be enqueued within a recirculation queue if completion of the instruction is blocked by a detected blocking condition. Once enqueued, instructions contained within the recirculation queue may be reissued once a blocking condition of an instruction within the recirculation queue is satisfied. Accordingly, a power optimized replay scheme as described herein optimizes power while retaining the advantages provided by selectively replaying of blocked instructions to improve power efficiency.